

2. Linear Ball Bearing precision series type KB - SW..G

2.1 Lubrication

Linear bearings type KB - SW..G are supplied coated with rust inhibiting oil. Linear bearings type KB..PP / SW..GUU are supplied packaged with lithium soap grease.

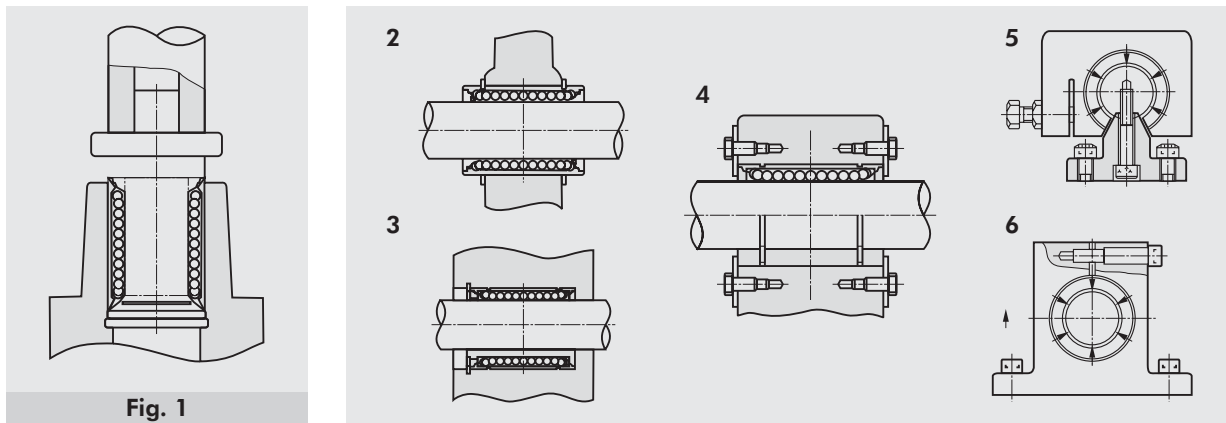
2.2 Mounting tolerances

The bearing assembly should be performed as to insure operation with adequate clearance. Unsuitable operating clearance could lead to poor running performance or lower than expected durability. The operating clearance of the adjustable or open version of the linear bearings can be adjusted by elastically deforming the outer ring. The suitable mounting tolerances for the mating components are shown in table 2.1.

Note: The operating clearance is application dependent and could be zero or negative (preload). In the latter case the friction as well as the smooth running should be checked for suitability.

Table 2.1

Dimensional series	Shaft		Housing	
	Normal operating clearance	Operation without clearance	Normal operating clearance	Operation without clearance
KB	h6	i6	H7	J7



2.3 Installation

Some cleanliness precautions should be taken before assembling **SLB** Linear Bearings in their housings. Lack of cleanliness could lead to reduction of the bearing life. The installation of the units is not particularly difficult, though precaution should be observed to avoid potential damages to the unit. Direct pressing onto the cage retaining rings should be avoided. A suitable tool should be used (Fig. 1) to provide pressure on the rim of the outer ring. Once the bearing is mounted in the housing, the assembled unit should be installed onto the shaft paying attention not to score the shaft or to pop the balls from the bearing. When two shaft assemblies are assembled in a parallel assembly, the parallelism between the shafts should be checked to insure smooth running. The mounting examples shown in Fig. 2 through 6 should be used as guidelines to design and select the suitable bearings and support units.